

CLAIMS

[1] A display apparatus, comprising:

 a substrate;

5 a first electrode group made up of a plurality of electrode patterns which are arranged adjacent to one another on the substrate, and extend in a first direction;

 a second electrode group made up of a plurality of electrode patterns which are arranged adjacent to one another on the substrate, and extend in a second direction which is different from the first direction; and

10 a plurality of display elements which are each formed in correspondence to an intersection point of one electrode pattern among the first electrode group and one electrode pattern among the second electrode group,

 wherein

 at least the first electrode group includes a plurality of electrode patterns which are each connected to a drive circuit at one end, and are different in length from the one end to the other end,

15 each of the plurality of electrode patterns has a lamination structure which has a first conductor having a first sheet resistivity, and a second conductor having a second sheet resistivity lower than the first sheet resistivity,

20 each of the plurality of electrode patterns is provided with a higher resistance region where the second conductor is removed, and

 the length of the higher resistance region is changed according to the length of the electrode pattern for each of said plurality of electrode patterns.

25 [2] The display apparatus of claim 1, wherein, in the plurality of electrode patterns, the length of the higher resistance region is reduced with the length of the electrode pattern.

[3] The display apparatus of claim 1, wherein the plurality of electrode patterns have substantially the same resistivity value from the one end to the other end.

30 [4] The display apparatus of claim 1, wherein, on the substrate, a display region where the plurality of electrode patterns extend in parallel with one another at a first spacing, a terminal region where the one ends of said plurality of electrode patterns in the display region are arranged at a second smaller spacing, and a connection part where the plurality of electrode

patterns in the display region are respectively connected to the corresponding one ends in the terminal region are provided, in the terminal region, in each of the electrode patterns, the second conductor is removed, and the higher resistance region is formed such that it is continued to the terminal region in the connection region.

5 [5] The display apparatus of claim 4, wherein, in the display region, the plurality of electrode patterns constituting the first electrode group are repetitively formed in the second direction, among the plurality of electrode patterns, the length of the electrode pattern in the middle is the shortest, and the length of the electrode pattern is symmetrically increased from 10 the electrode pattern in the middle toward both outside directions.

[6] The display apparatus of claim 5, wherein, in the connection region, the plurality of electrode patterns extend while maintaining the parallel relationship.

15 [7] The display apparatus of claim 5, wherein the higher resistance region has the greatest length at the electrode pattern in the middle, and the length of the higher resistance region is symmetrically reduced from the electrode pattern in the middle toward both outside directions.

20 [8] The display apparatus of claim 7, wherein the length of the higher resistance region is linearly reduced from the electrode pattern in the middle toward both outside directions according to the distance from the electrode pattern in the middle.

25 [9] The display apparatus of claim 7, wherein the length of the higher resistance region is stepwise reduced from the electrode pattern in the middle toward both outside directions according to the distance from the electrode pattern in the middle.

30 [10] The display apparatus of claim 1, wherein the first conductor is made up of a transparent oxide electrode material, and the second conductor is made up of a metallic material.

[11] The display apparatus of claim 1, wherein the second conductor is laminated on the first conductor.

[12] The display apparatus of claim 1, wherein the second conductor is embedded in the first conductor.

[13] The display apparatus of claim 1, wherein an electrode pattern in the second electrode group is connected to another drive circuit, and an electrode pattern in the first electrode group forms, with the electrode pattern in the second electrode group, a current path for the drive current flowing in a display element which is formed at the intersection point.

[14] The display apparatus of claim 1, wherein the display element is an organic EL display apparatus.

[15] The display apparatus of claim 11, wherein the second conductor is formed such that it partially overlaps the first conductor in the direction along the width of the electrode pattern.

[16] The display apparatus of claim 1, wherein the first conductor is laminated on the second conductor.

[17] The display apparatus of claim 16, wherein the second conductor is formed such that it partially overlaps the first conductor in the direction along the width of the electrode pattern.

[18] The display apparatus of claim 1, wherein, on the substrate, a display region where the plurality of electrode patterns extend in parallel with one another at a first spacing, a terminal region where the one ends of the plurality of electrode patterns in the display region are arranged at a second smaller spacing, and a connection part where the plurality of electrode patterns in the display region are respectively connected to the corresponding one ends in the terminal region are provided, and in each of the electrode patterns in the connection region, the second conductor is removed at a plurality of places.